

Title (en)  
AIRLESS DISPENSING DEVICE

Title (de)  
AIRLESS-ABGABEVORRICHTUNG

Title (fr)  
DISPOSITIF DE DISTRIBUTION AIRLESS

Publication  
**EP 1064205 B1 20020619 (FR)**

Application  
**EP 99909051 A 19990319**

Priority  
• FR 9900645 W 19990319  
• FR 9803734 A 19980326

Abstract (en)  
[origin: FR2776633A1] The invention concerns a dispensing device without air circulation, such as an airless pump, for dispensing a fluid, said device comprising a dispensing chamber (14) with variable volume including an intake (12) provided with an intake check valve (51; 53) and an outlet provided with an outlet check valve, said dispenser further comprising a piston (3) for varying the dispensing chamber (14) volume, sealing means (51; 52; 55; 63) being provided to seal the dispensing chamber (14) substantially at its intake (12) before the first use thereof, characterised in that the sealing means are formed by the intake check valve (51, 53).

IPC 1-7  
**B65D 47/34**; **B05B 11/00**

IPC 8 full level  
**B05B 11/00** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)  
**B05B 11/0005** (2013.01 - EP US); **B05B 11/0008** (2013.01 - EP US); **B05B 11/1023** (2023.01 - EP US); **B05B 11/1025** (2023.01 - EP US); **B05B 11/1047** (2023.01 - EP US); **B05B 11/1067** (2023.01 - EP US); **B05B 11/0097** (2013.01 - EP US)

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**FR 2776633 A1 19991001**; **FR 2776633 B1 20000609**; DE 69901890 D1 20020725; DE 69901890 T2 20030220; EP 1064205 A1 20010103; EP 1064205 B1 20020619; ES 2178877 T3 20030101; US 6332561 B1 20011225; WO 9948766 A1 19990930

DOCDB simple family (application)  
**FR 9803734 A 19980326**; DE 69901890 T 19990319; EP 99909051 A 19990319; ES 99909051 T 19990319; FR 9900645 W 19990319; US 64710501 A 20010124